

Title (en)
Electromagnetic fluid pump.

Title (de)
Elektromagnetische Pumpe für fließfähige Stoffe.

Title (fr)
Pompe électromagnétique pour un fluide.

Publication
EP 0056462 A1 19820728 (EN)

Application
EP 81110380 A 19811211

Priority
US 22596281 A 19810119

Abstract (en)
This invention relates generally to fluid pumps of the type which may be used, for example, to aerate water in an aquarium. <??>Specifically, the pump of the invention comprises an electromagnet motor unit (14) including an electromagnet (70) for producing a reversing magnetic field to drive a fluid pump unit including a pump casing (32) and a flexible diaphragm (16) defining a fluid pumping chamber (18). A permanent magnet (30) is carried by the flexible diaphragm and is alternately repelled and attracted by the magnetic field to displace the diaphragm to expand and contract the pumping chamber.

IPC 1-7
F04B 45/02

IPC 8 full level
F04B 35/04 (2006.01); **F04B 45/027** (2006.01)

CPC (source: EP KR US)
F04B 17/04 (2013.01 - KR); **F04B 45/027** (2013.01 - EP US)

Citation (search report)
• US 3155308 A 19641103 - TUSSEY CHESTER E
• US 2814429 A 19571126 - BUCHANAN BEVERLY J
• US 2471796 A 19490531 - THIBERG GEORGE A
• US 3572980 A 19710330 - HOLLYDAY JOSEPH S
• US 2747789 A 19560529 - GEORGE SZEKELY
• DE 1503464 A1 19690717 - UNGER LADISLAUS

Cited by
EP1849355A3; EP1856972A3; US5711487A

Designated contracting state (EPC)
BE DE FR GB IT NL

DOCDB simple family (publication)
EP 0056462 A1 19820728; CA 1174112 A 19840911; JP S57140582 A 19820831; KR 830009391 A 19831221; US 4406591 A 19830927

DOCDB simple family (application)
EP 81110380 A 19811211; CA 392384 A 19811216; JP 20724081 A 19811223; KR 820000186 A 19820118; US 22596281 A 19810119